



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,055	03/31/2006	Gijsbertus Johannes Verduijn	790063.00090	8515
26710 7590 09/14/2007 QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			EXAMINER DEUBLE, MARK A	
			ART UNIT 3651	PAPER NUMBER
			MAIL DATE 09/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/538,055	Applicant(s) VERDUIJN ET AL.	
	Examiner Mark A. Deuble	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

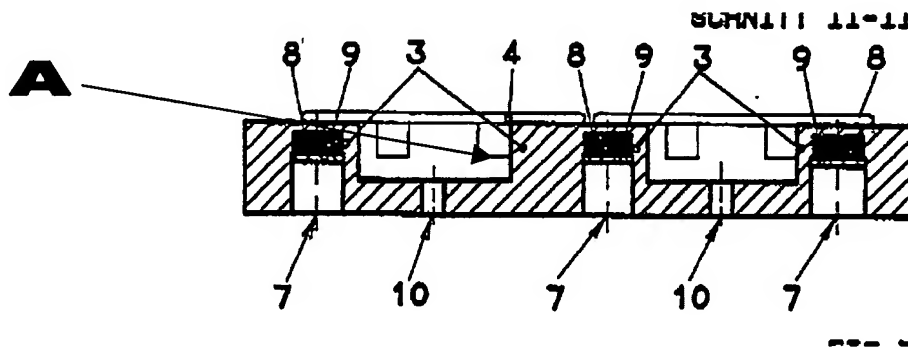
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-6, 12-13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by German document number 4338505, as in the previous office action (note changes in bold).

The German document shows a guide bend segment for a modular conveyor 5/6 made from a pair of curved plastic parts 1 with straight run-in and run-out segments forming a substantially flat upper side extending along an axis in a curved manner. **The segment includes a guide face in which a guide is formed. The guide comprises two grooves proceeding in the longitudinal direction of the profile that are formed between the central projection 3 and legs 3 located outside the grooves on inside and outside bend sides of the projection so that the profile has a substantially E-shaped cross section. The central projection 3, which includes a adjacent segments of the pair of curved plastic parts, includes a side face (A in**

Art Unit: 3651

the Fig. reproduced below) that engages modules of the chain to guide the modules along the axis proceeding in the curved manner. The side face faces the leg 3 on the left side of the figure.



The legs and the projection include magnets 8 detachably connected to the profile by variable magnetic holding parts adjacent the guide face that would pull the body parts of successive modules of a chain to be guided against the upper side of the profile through cooperation with magnetic hinge pins of a module chain. **While the exact structure of the modules of the chain is unclear, if the chain to be guided included metallic hinge pins, the magnets in the legs would pull successive modules of the chain against the upper side through cooperation with the hinge pins.** Thus The German document shows all the structure required by claims 1-2, 4-6 12-13 and 15-17.

In response to this rejection, the applicant argues that the German document fails to show a guide bend segment in which each guide comprises two grooves. The examiner respectfully disagrees. While the guide bend segment of the German document may be construed as being formed by two separate U-shaped guides (each guide being formed by one of the plastic parts 1) with a single groove, the two plastic parts 1 forming the segment may also be construed as forming a single guide (albeit one formed from two parts), having two grooves and an E-shaped

Art Unit: 3651

cross section. There is no requirement in the claims that the guide be formed from as a single integral part and thus the German document still reads on the claims. As a courtesy, the examiner would like to point out that even if the claims required such an integral construction, the claims are very likely be considered to be obvious in view of the German document as making parts integral or separable is rarely a patentable distinction.

Additionally, in regard to the recitation of claim 12 that “the magnets in the legs of the at least one guide pulling successive modules of the chain against the upper side through cooperation with the hinge pins of the modular conveyor chain,” it should be noted that since the claims are directed to the bend segment itself and not to the combination of the bend segment and the conveyor chain, this recitation is viewed as an intended use recitation. Since the magnets in the legs of the segment of the German document would be capable of pulling metallic hinges pins of a modular conveyor chain, it show all the structure necessary to meet that intended use limitation.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of van Zijderveld (U.S. Patent No. 6,085,896) as in the previous office action.

The German document shows generally all the structure required by the claims except for

Art Unit: 3651

the magnets removably connected by means of a closing plate. However, van Zijderveld shows a guide bend segment for a modular conveyor that uses a ferromagnetic closure plate 11 to detachably connect magnets 10' to the guide bend segment. Van Zijderveld teaches that using a ferromagnetic closure plate to secure the magnets to the guide bend segment advantageously increases the force of attraction exerted on the hinge pins of the conveyor. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a ferromagnetic closing plate to secure the magnets 8 of the German document to the guide bend segment in order to advantageously increase the force of attraction exerted on the modular conveyor chain according to the teachings of van Zijderveld. When this is done, the resulting apparatus would have all the structure required by claim 1-6 and 12-17.

Furthermore, assuming for the sake of argument, that the German document does not show magnets that are detachably connected to the guide bend segment, it should be noted that when the magnets of the German document are connected to the guide bend segment using the closing plate taught by van Zijderveld, the magnets would be detachably connected to the guide bend segment as required by claim 4.

6. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of Langhans et al. (U.S. Patent No. 4,823,939) as in the previous office action.

The German document shows generally all the structure required by the claims except for the central projection provided with a side face on an outside bend proceeding in an inwardly converging manner from the upper side of the profile towards the base required by claim 7. However, Langhans et al. shows a guide bend segment 2 with a groove having a side face 7 on

Art Unit: 3651

an outside bend proceeding in an inwardly converging manner from the upper side of the upper side of the profile towards the base and a corresponding sliding surface formed by an insert piece 10 forming the side of a modular conveyor belt that converges away from the body part.

Langhans et al. teaches that this arrangement advantageously improves the guidance of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the central projection of the German document with a side face on an outside bend that proceeds in an inwardly converging manner from the upper side of the profile towards the base in order to improve guidance of the conveyor belt. When this is done the resulting apparatus would have all the structure required by claims 1-2, 4-7, 12-13 and 16-18.

8. Claims 1-2, 4-7, 12-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer (U.S. Patent No. 5,127,515) in view of Wallaart (U.S. Patent No. 4,642,298) as in the previous office action.

Damkjaer shows a guide bend segment 9 for a modular conveyor 4 with steel hinge pins that is made from several integral profile parts with straight run-in and run-out segments forming a substantially flat upper side 2 extending along an axis in a curved manner (note changes in bold). **The segment includes a guide face in which a guide is formed. The guide comprises two grooves proceeding in the longitudinal direction of the profile that are formed between the central projection 6 and legs 2 located outside the grooves on inside and outside bend sides of the projection so that the profile has a substantially E-shaped cross section. The central projection 6 includes a side face 14 that faces the leg 2 on the left side of the figure in order to engage modules of the chain to guide the modules along the axis proceeding in the curved manner.** The central projection has a side face 17 on an outside bend that proceeds

Art Unit: 3651

in an inwardly converging manner from the upper side of the profile towards the base that corresponds with sliding surfaces 13 of insert pieces 5 forming projections on the underside of the conveyor belt module body. The surfaces 13 converge away from the body part at the sides facing each other of the projections of the modular conveyor belt in order to improve guidance of the conveyor belt. Thus Damkjaer shows all the structure required by the claims except for the magnets detachably connected to the legs of the guide bend segment. However, Wallaart shows a guide bend segment 1 for a modular conveyor belt that has magnets detachably connected within the legs 2/3 of the segment. Wallaart teaches that the magnets in the legs advantageously hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the legs of the guide bend segment of Damkjaer with detachably connected magnets in order to hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt according to the teachings of Wallaart. When this is done the resulting apparatus would have all the structure required by claims 1-2, 4-7, 12-13 and 15-17.

In response to this rejection the applicant argues that Neither Damkjaer nor Wallaart disclose the combination of a bend segment with two grooves and magnets holding a module down by themselves and that there is no reason to combine the teachings of Wallaart and Damkjaer because the magnets in Wallaart merely duplicate the function of the profile slide in Damkjaer. The examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on



Art Unit: 3651

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response the second argument, while it is true that when the magnets of Wallaart are installed in the segment of Damkjaer both act to hold the conveyor down on the segment, they are not merely duplicative as suggested by the applicant. This is because the magnets would act to hold down the outside portions of the segment while the profile would act to hold down the central portion. By providing a force pulling the conveyor to the segment at the sides as well as the center, the conveyor would be more securely held against the segment and torque forces would be more evenly counteracted. Thus, the teachings of Wallaart and Damkjaer were properly combined.

9. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer in view of Wallaart as applied to claims 1-2, 4-7, 12-13 and 15-17above, and further in view of van Zijderveld.

The apparatus of Damkjaer as modified according to the teachings of Wallaart would show generally all the structure required by claim 3except for the magnets removably connected by means of a closing plate. However, van Zijderveld shows a guide bend segment for a modular conveyor that uses a ferromagnetic closure plate 11 to detachably connect magnets 10 ' to the guide bend segment. Van Zijderveld teaches that using a ferromagnetic closure plate to secure the magnets to the guide bend segment advantageously increases the force of attraction exerted on the hinge pins of the conveyor. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a ferromagnetic closing plate to secure the magnets to the legs of the guide bend segment of the apparatus of Damkjaer as modified

Art Unit: 3651

according to the teachings of Wallaart in order to advantageously increase the force of attraction exerted on the modular conveyor chain according to the teachings of van Zijderveld. When this is done, the resulting apparatus would have all the structure required by claim 1-7 and 10-11.

***Allowable Subject Matter***

7. Claims 8-11 are allowed.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

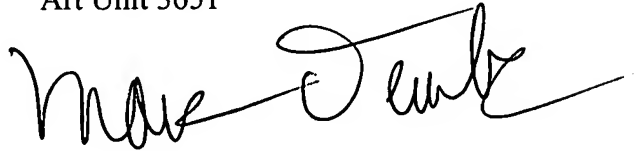
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark A. Deuble  
Primary Examiner  
Art Unit 3651

A handwritten signature in black ink, appearing to read 'Mark A. Deuble', with a long horizontal flourish extending to the right.

md

MARK A. DEUBLE  
PRIMARY EXAMINER